SONY

Sony Storage Media

DDS Data Cartridge
DDS4 delivers 40GB (compressed) storage in a tiny standard tape cartridge.

DDS Digital Data Storage | DDS2 Digital Data Storage | DDS3 Digital Data Storage | DDS4 Digital Data Storage

DDS lineup – Sony technology makes it possible

A single tiny DDS4 cartridge (DGD150P) holds a massive 20GB of uncompressed data. Key to such high-density storage is Sony's helical scan technology, originally developed for video applications.

Outstanding durability and tape travel stability

Sony's highly durable HCL (High Cross Linkage) binder raises reliability and durability to withstand the stress of repeated use. In addition, Sony's RDP mechanism sandwiches the tape between textured sheets to support smooth tape winding. The cartridge lid is made of strong plastic to protect the tape against accidental drops or mechanical shock.

DDS

Digital Data Tape Cartridge

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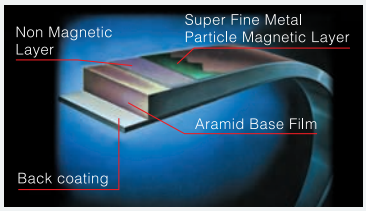
Unique low torque cartridge

As tape winds onto a reel, torque rises along with diameter. To minimize this torque effect in fast-forward and rewind search modes, Sony uses special designs for the DDS hubs, lower sheet, and lower shell. The shell also improves overall cartridge strength to minimize potential deformation under external stress.

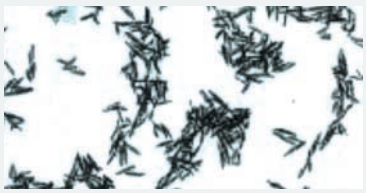
Thin dual-layer coating technology

Sony DDS3 and DDS4 tapes use a dual-layer coating comprising an ultra-thin magnetic layer and a nonmagnetic layer. The ultra-thin magnetic layer provides high output even in the high frequency range essential for high-density recording. The nonmagnetic layer creates a smooth surface to support tape travel stability and durability.



Ultra-fine magnetic particles

Although smaller magnetic particles are more difficult to disperse within the binder, Sony's high dispersion technology achieves outstanding results even with ultra-fine particles. The magnetic particles for DDS3 and DDS4 tapes are approximately 0.1μm (100nm), but the output value for the shortest recorded wavelength is 5dB or higher than that of DDS2.



Magnetic Particles ⊢⊣ 0.3μm

Cleaning cartridge

Sony developed the DGD15CL cleaning cartridge to provide ideal results for all DDS drives. While maximizing cleaning effectiveness, it minimizes adverse effects such as head wear. It can be used about 50 times (depending on the drive).

Mechanical Characteristics	DG60P	DG90P	DGD120P	DGD125P	DGD150P
Format	DDS1	DDS1	DDS2	DDS3	DDS4
Magnetic Material	Metal HAD	Metal HAD	HESA	MP++	MP+++
Base Material	PET	PET	Aramid	Aramid	Aramid
Recording Density	61 kbpi(3 kftpmm)	61 kbpi(3 kftpmm)	61 kbpi(3 kftpmm)	122 kbpi(6 kftpmm)	122 kbpi(6 kftpmm)
Recording Capacity	1.3GB(*2.6GB)	2.0GB(*4.0GB)	4.0GB(*8.0GB)	12.0GB(*24.0GB)	20.0GB(*40.0GB)
Residual Magnetic Flux Density	250 mT	250 mT	295 mT	390 mT	400 mT
Coercive Force	121 kA/m	121 kA/m	130 kA/m	190 kA/m	195 kA/m
Tape Width (mm)	3.81	3.81	3.81	3.81	3.81
Tape Thickness (μm)	13.0	9.0	6.8	6.8	5.6
Tape Length (m)	60	91	120	125	150

*Compression ratio 2:1

Dimensions

Cartridge Dimensions (mm) : 73x54x10.5
Weight (g) : 44 (with case)

Environmental Requirements

Operation Conditions (°F(°C);%RH) : 15~55 (59~131);10~80*
Storage Conditions (°F(°C);%RH) : 5~32 (41~89.6);20~60*
Transportation Conditions (°F(°C);%RH) : -40~45 (-40~113);5~80*

*Maximum wet bulb temperature : 79°F(26°C) at no condensation.

For more Information, visit our website at
http://www.sony.co.jp/datamedia